



PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants : Bezos, et al. ) Group Art Unit: 3625  
Appl. No. : 09/377,322 )  
Filed : August 19, 1999 )  
For : PURCHASE NOTIFICATION )  
SERVICE FOR ASSISTING )  
USERS IN SELECTING ITEMS )  
FROM AN ELECTRONIC )  
CATALOG )  
Examiner : Naeem Haq )

**RECEIVED**  
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**GROUP 3600**

**APPELLANTS' BRIEF**  
**PURSUANT TO 37 C.F.R. § 1.192**

Board of Patent Appeals and Interferences  
Washington, D.C. 20231

Dear Sir:

Appellants, Applicants in the above-captioned patent application, appeal the final rejection of Claims 45-50, 53-55 and 63 set forth in the final Office Action mailed on August 27, 2003. A check for the filing fee is enclosed. Please charge any additional fees that may be required now or in the future to Deposit Account No. 11-1410.

**I. REAL PARTY IN INTEREST**

The real party of interest in the present application is Amazon.com, Inc.

**II. RELATED APPEALS AND INTERFERENCES**

An appeal is currently pending in U.S. Appl. 09/377,447, filed August 19, 1999, which was filed concurrently with and contains the same disclosure as the present application.

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### **III. STATUS OF CLAIMS**

Claims 45-50, 53-55 and 63 are currently pending in the application, and are attached hereto as an appendix. All of these pending claims were finally rejected by the Examiner. All other claims have been withdrawn by the Examiner or cancelled by Appellants. The withdrawn claims are now pending in a divisional application.

### **IV. STATUS OF AMENDMENTS**

Appellants did not amend any claims in response to the final Office Action.

### **V. SUMMARY OF THE INVENTION**

The present application discloses various computer-implemented services for assisting users of an electronic catalog in making informed item purchase decisions. These services, which are implemented as part of an electronic catalog system, involve the formation and use of user groups or "communities" for purposes of exposing information about purchase events and trends. The communities preferably include "explicit-membership" communities that users actively join. For example, in a preferred embodiment, users can use a sign-up page (see Figure 1) to explicitly join communities associated with specific universities, outdoor clubs, community groups, and professions. Users may also have the option to add "private" communities (communities that are not exposed to a general user population) to the system. See page 3, lines 1-6 and page 10, lines 4-31.

The particular service that is relevant to this appeal is referred to in the present application as a "Contact Information Exchange" service, and is described primarily in the following sections of the present application: page 4, lines 2-15; page 8, lines 14-25; page 13, line 21 to page 14, line 27; page 20, lines 9-18; page 22, lines 13-25 and page 24, line 19 to page 25, line 7. The Contact Information Exchange service operates generally by determining whether a catalog item selected by a "first user" for viewing has been purchased by one or more other users who are affiliated with the first user. For example, the service may determine whether the selected item has been purchased by one or more users that (1) belong to an explicit-membership community of which the first user is a member, or (2) are included within a personal address

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book of the first user. To address privacy issues, users who have not granted authorization to expose their respective purchases may be excluded.

The task of determining whether a selected item has been purchased by other, affiliated users is preferably performed when the first user accesses an item detail page, or another type of catalog page, that describes the item. If a "second user" who has purchased the item is identified, the requested catalog page is supplemented with a notification that the item has been purchased by the second user. As depicted in Figure 3, which shows an example item detail page as supplemented by the service, this notification may include contact information of the second user, and may include a link for sending a message to the second user. The first user can thus contact the second user, if desired, to obtain more information about the particular item. Because the notifications are specific to items the first user actually accesses or views in the catalog, the first user is not overwhelmed with purchase notifications involving items that are of little or no interest to the first user.

An important benefit of the service is that it allows users to efficiently learn about the purchase activities of users with which they are associated, and thus to benefit from the research and knowledge of such users. Another benefit is that the service provides an efficient mechanism for enabling users to communicate with others about the items they are considering purchasing.

## **VI. ISSUES PRESENTED ON APPEAL**

The following issue is presented:

Whether Claims 45-50, 53-55 and 63 are properly rejected under 35 U.S.C. § 103(a) as unpatentable over Bieganski (U.S. Patent No. 6,321,221) in view of Chislenko (U.S. Patent No. 6,041,311), and further in view of Information Week "Just Add People," and Official Notice. The Bieganski, Chislenko and Information Week references will be collectively referred to as "the applied references."

## **VII. GROUPING OF CLAIMS**

All of the rejected claims in the present application should not stand or fall together. Appellants, for purposes of this appeal only, are grouping the claims as follows:

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GROUP 1 consists of independent Claim 45, and Claim 49 which depends from Claim 45. Claim 45 is directed to a computer-implemented method of assisting users in selecting items to purchase from an electronic catalog. The method includes: maintaining community data indicative of user memberships within specific explicit-membership communities that users explicitly join, wherein each of the explicit-membership communities represents a respective subset of a general user population; monitoring online browsing of the electronic catalog by a first user who is a member of an explicit-membership community to detect that an item accessed by the first user has been purchased by a second user who is also a member of the explicit-membership community, as reflected by the purchase history data and the community data; and in response to detecting that the item has been purchased by the second user, supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user, said catalog page being a page on which the item is displayed.

GROUP 2 consists of independent Claim 53, and Claim 54 which depends from Claim 53. Claim 53 is directed to a method performed by a server system that provides functionality for browsing and making purchases from an electronic catalog. The method comprises: monitoring online browsing of the electronic catalog by a first user to detect that an item accessed by the first user has been purchased by a second user that is included in a personal address book of the first user, as reflected by purchase history data and the personal address book data; and in response to detecting that the item has been purchased by the second user, supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user.

GROUP 3 consists of dependent Claim 50, which requires that the “community” recited in Claim 45 (Group 1) be a “private community.”

GROUP 4 consists of dependent Claims 46, 47 and 55. All of these dependent claims require the following additional step: in response to detecting that the item has been purchased by the second user, providing an option to the first user to send a message to the second user.

GROUP 5 consists of dependent Claims 48 and 63, each of which states that the “catalog page is an item detail page.”

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Appellants believe that other dependent claims further define over the applied references; however, in the interest of administrative economy and efficiency, Appellants wish to narrow the issues by grouping the claims as set forth above.

## **VIII. ARGUMENT**

### **A. EACH CLAIM GROUP IS PATENTABLY SEPARATE**

For the reasons set forth below, each claim group is patentably separate.

Group 1: Claim 45, which is the sole independent claim in Group 1, recites limitations that provide patentable distinctions over the applied references. For example, as discussed below, the applied references do not suggest the following: “in response to detecting that the item has been purchased by the second user, supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user, said catalog page being a page on which the item is displayed.”

Group 2: Claim 53, which is the sole independent claim in Group 2, recites the use of “personal address book data” of users, and more specifically, recites the step of detecting “that an item accessed by the first user has been purchased by a second user that is included in a personal address book of the first user.” This feature provides a patentable distinction over the applied references, and is not required by the claims of Group 1.

Group 3: Unlike the claims of Groups 1 and 2, the sole claim in Group 3 requires that the “community” be a “private community.” Because the applied references do not suggest the sharing of information among members of a private community, as claimed, Group 3 provides a separate patentable distinction over the applied references.

Group 4: All of the claims in Group 4 require the following additional step: in response to detecting that the item has been purchased by the second user, providing an option to the first user to send a message to the second user. This step, which is not required by the claims of Groups 1-3, provides an additional patentable distinction over the applied references.

Group 5: The limitation added by the claims of Group 5—namely that the catalog page is an item detail page—provides an additional patentable distinction over the applied references, and is not required by the claims of Groups 1-4.

**B. DISCUSSION OF REFERENCES RELIED UPON BY EXAMINER**

Each reference relied on by the Examiner is discussed below.

**1. Bieganski (U.S. Patent No. 6,321,221)**

Bieganski discloses a collaborative recommendations process in which users having similar profiles are grouped together into “affinity groups” (also called “neighborhoods”) for purposes of generating personalized recommendations. For example, all users that share at least two common items within their respective purchase histories may be grouped together to form a particular affinity group. If a particular item appears frequently within the purchase histories of the members of this affinity group, that item may be recommended to those members who have not yet purchased the item. To increase the likelihood that the recommendations will be useful, items that are generally popular are not recommended.

Nothing in Bieganski suggests notifying users of purchases made by other users. In this regard, the affinity groups described in Bieganski apparently are not formed for purposes of enabling users to learn about the actions of, or to communicate with, other users. In fact, there is no indication in Bieganski that the users are even aware of the affinity groups.

**2. Chislenko (U.S. Patent No. 6,041,311)**

Chislenko discloses a system in which users can rate items in a database and then obtain personalized recommendations of other items in the database. As with Bieganski, these recommendations are generated using a collaborative recommendations algorithm. Chislenko also discloses chat room and messaging functions through which users can communicate with each other, and discloses a feature in which one user is informed that another user shares an interest in a common recording artist. Chislenko at col. 21, lines 11-26. Nothing in Chislenko discloses or suggests notifying users of purchases made by other users.

**3. Information Week “Just Add People”**

The Information Week article summarizes some of the features of certain collaborative filtering software products. In rejecting the claims, the Examiner relied on the descriptions at page 2, paragraph 4, of a feature of Netperceptions GroupLens. Using this feature, a user could apparently specify a group of other users, and then obtain a list of recommendations based on the collective preferences of such users. As discussed below, the Examiner took the position that these

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groups of users represent "explicit-membership communities that users explicitly join" within the meaning of Claim 45.

The Examiner also relied on the disclosure at page 2, paragraph 5, of an intranet application that generates a personalized home page for each user of the system. The personalized home pages display: (1) resources likely to interest the users, (2) other users with similar interests, and (3) information about the ratings submitted by other users.

Nothing in Information Week discloses or suggests notifying users of purchases made by other users.

### **C. DISCUSSION OF THE ISSUES ON APPEAL**

For the reasons set forth below, Appellants respectfully submit that the obviousness rejection is improper.

#### **1. The applied references do not disclose or suggest all of the claim limitations of the broadest claim(s) of each claim group.**

In order to establish prima facie obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. See MPEP § 2143.03. In this case, the applied references fail to satisfy this requirement with respect to the broadest claim or claims of each claim group. Each claim group is discussed separately below.

#### Group 1

Group 1 consists of Independent Claim 45, and Claim 49 which depends from Claim 45. Claim 45 reads as follows:

45. A computer implemented method of assisting users in selecting items to purchase from an electronic catalog of items, the method comprising:
- maintaining purchase history data for each of a plurality of users of the electronic catalog;
  - maintaining community data indicative of user memberships within specific explicit-membership communities that users explicitly join, wherein each of the explicit-membership communities represents a respective subset of a general user population;
  - monitoring online browsing of the electronic catalog by a first user who is a member of an explicit-membership community to detect that an item accessed by the first user has been purchased by a second user who is also a member of the explicit-membership community, as reflected by the purchase history data and the community data; and

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in response to detecting that the item has been purchased by the second user, supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user, said catalog page being a page on which the item is displayed.

The Examiner takes the position that Information Week discloses the use of “explicit-membership communities that users explicitly join,” as set forth in the claim. See Final Office Action at page 5, lines 11-15 and page 8, lines 13-17. Appellants respectfully disagree. The feature described in the cited portion of Information Week apparently involves an ability for a user to specify a group of other users, and to then obtain recommendations that are based on the collective interests of these users. Nothing in Information Week suggests that the users “explicitly join” this group. Rather, the group is apparently defined solely by the user seeking recommendations, without the involvement of the selected users. Bieganski and Chislenko similarly fail to disclose or suggest the use of explicit membership communities that users explicitly join.

Because none of the applied references involves the use of explicit-membership communities, it follows that the applied references do not disclose or suggest either “maintaining community data indicative of user memberships within specific explicit-membership communities that users explicitly join ...,” or “monitoring online browsing of the electronic catalog by a first user who is a member of an explicit-membership community to detect that an item accessed by the first user has been purchased by a second user who is also a member of the explicit-membership community ....”

The applied references also fail to disclose or suggest “supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user, said catalog page being a page on which the item is displayed,” in the context of the other claim limitations. With respect to the requirement that there be a “notification that the item has been purchased,” the Examiner acknowledges that “neither Bieganski nor Chislenko explicitly teaches exposing the purchases made by one user to another user.” The Examiner asserts, however, that this limitation is obvious in view of Bieganski’s use of purchase histories to form neighborhoods and Chislenko’s teaching of online chat between users sharing common interests. Final Office Action at page 4, line 15 to page 5, line 6.



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Appellants respectfully disagree. Nothing in either Chislenko or Bieganski suggests combining their respective teachings to produce a system in which the purchases of users are exposed to other users, as claimed. Indeed, one skilled in the art would not be motivated to make such a combination, as none of the applied references addresses the significant privacy issues that are raised by notifying users of purchases made by other users.

Regarding the requirement in Claim 45 that the purchase notification be displayed by "supplementing a catalog page ... on which the item is displayed," the Examiner asserts that this feature is obvious in view of Information Week's disclosure of a "personalized home page" that displays resources of interest and neighbors with similar interests. See Final Office Action at page 8, lines 17-22. Appellants again respectfully disagree. A personalized home page of the type described in Information Week is not a catalog page "on which the item [purchased by the second user] is displayed." In addition, nothing in Information Week suggests using the personalized home pages disclosed therein to display notifications of actions performed by other users.

Because the applied references fail to disclose or suggest all of the limitations of Claim 45, the obviousness rejection of the Group 1 claims is improper. As discussed separately below, Appellants also believe the rejections of the claims of Groups 1-5 are improper because the applied references do not suggest the desirability of the claimed invention.

#### Group 2

Group 2 consists of Independent Claim 53, and Claim 54 which depends from Claim 53. Claim 53 reads as follows:

53. A computer implemented method of assisting users in selecting items to purchase from an electronic catalog of items, the method comprising:
- maintaining purchase history data for each of a plurality of users of the electronic catalog;
  - maintaining personal address book data for each of a plurality of the users;
  - monitoring online browsing of the electronic catalog by a first user to detect that an item accessed by the first user has been purchased by a second user that is included in a personal address book of the first user, as reflected by the purchase history data and the personal address book data; and

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in response to detecting that the item has been purchased by the second user, supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user;

wherein the method is performed by a server system that provides functionality for browsing and making purchases from the electronic catalog.

The applied references fail to disclose or suggest all of the limitations of this claim. For example, the applied references do not disclose or suggest “maintaining personal address book data for each of a plurality of the users,” and “monitoring online browsing of the electronic catalog by a first user to detect that an item accessed by the first user has been purchased by a second user that is included in a personal address book of the first user, as reflected by the purchase history data and the personal address book data.” In connection with these limitations, the Examiner acknowledges that the combination of the applied references does not teach maintaining personal address book data for each of a plurality of users, or that the second user is included in the personal address book of the first user. Final Office Action at page 6, lines 6-8.

The Examiner nevertheless asserts that these limitations are obvious in view of the disclosure in Information Week that a user can submit a group of users to obtain recommendations that are based on the collective interests of such users. Final Office Action at page 6, lines 9-15. Appellants respectfully disagree. Nothing in Information Week suggests the use of personal address books. In addition, even if Information Week could be read as suggesting the use of a personal address book to define a group of users to submit (as asserted by the Examiner), it still would not be obvious from the applied references to use such address books as claimed—namely “to detect that an item accessed by the first user has been purchased by a second user that is included in a personal address book of the first user.”

For the reasons set forth above for Group 1, Appellants additionally submit that the applied references do not disclose or suggest “in response to detecting that the item has been purchased by the second user, supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user.”

Because the applied references fail to disclose or suggest all of the limitations of Claim 53, the obviousness rejection of the Group 2 claims is improper.

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### Group 3

Group 3 consists of dependent Claim 50, which depends from Claim 45 (Group 1), and add the limitation “wherein the community is a private community.” As disclosed at page 10, lines 23-29 of the present application, the use of private communities provides a mechanism for a closed group of users to privately share information about their purchases:

In the illustrated embodiment, a user wishing to add a new community has the option of designating the community as “private,” meaning that the community’s existence and/or data will not be exposed to the general public. Private communities may be useful, for example, when a closed group of users wishes to privately share information about its purchases. Upon creating a private community, the user may, for example, be prompted to enter the email addresses of prospective members, in which case the system may automatically send notification emails to such users.

The applied references do not suggest the exposure of user purchases among users of a private, explicit-membership community as required by Claim 50. In this regard, contrary to the Examiner’s assertion at page 7, paragraph 1 of the Final Office Action, Information Week does not involve the use of private, explicit membership communities.

Because Claim 50 recites an additional feature that is not suggested by the applied references, Claim 50 is patentable over the applied references regardless of the disposition of Claim 45 (Group 1).

### Group 4

Group 4 consists of dependent Claims 46, 47 and 55, which require the following additional feature: “in response to detecting that the item has been purchased by the second user, providing an option to the first user to send a message to the second user.” As disclosed in the present application, this feature provides a mechanism for a first user who is interested in a particular item to obtain information about the item from a second user who has already purchased the item. Appellants submit that this feature provides a patentable distinction over the applied references when viewed in the context of the limitations of base Claims 45 and 53. In this regard, Chislenko’s messaging function apparently does not attempt to put a user who is viewing an item in touch with another user who has already purchased that item.

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Because the claims in Group 4 require additional limitations that are not suggested by the applied references, the Group 4 claims are patentable over the applied references regardless of the disposition of base Claims 45 and 53.

#### Group 5

Group 5 consists of dependent Claim 63, which depends from Claim 53 (Group 2). Claim 63 adds the limitation “wherein the catalog page is an item detail page.” Claim 63 thus requires that an item detail page requested by the “first user” be supplemented to include a notification that the item has been purchased by the “second user.” As none of the applied references discloses or suggests supplementing an item detail page with *any* type of notification, the limitations added by Claim 63 provide an additional patentable distinction over the applied references. Claim 63 is therefore patentable over the applied references regardless of the disposition of base Claim 53.

#### **2. The applied references do not suggest the desirability of the claimed invention.**

As set forth in MPEP 2143.01, in order to establish obviousness based on a combination of references, the prior art must suggest the desirability of the claimed combination. “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP 2143.01 (emphasis original), citing *In re Mills*, 916 F.2d 680; 16 USPQ2d 1430 (Fed. Cir. 1990).

Appellants respectfully submit that the applied references do not suggest the desirability of the claimed invention. For example, none of the applied references suggests the desirability of notifying a first user that a catalog item that he or she is accessing has been purchased by a second user who either (1) is a member of an explicit-membership community of which the first user is a member (Claim 45), or (2) is included in a personal address book of the first user (Claim 53). As described above, the desirability of providing such notifications is that the notifications allow users to efficiently make more informed purchase decisions that reflect the knowledge and research of other users.

Because the applied references fail to suggest the desirability of the claimed invention, the rejections of the claims of Groups 1-5 are improper.

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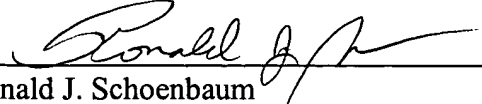
**IX. CONCLUSION**

For the reasons set forth above, Appellants submit that the rejections of the claims of Groups 1-5 are improper, and request that these rejections be reversed.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 3-29-04

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**APPENDIX A – PENDING CLAIMS**

1-44: (withdrawn)

10-11: (canceled)

12-44: (withdrawn)

45. A computer implemented method of assisting users in selecting items to purchase from an electronic catalog of items, the method comprising:

maintaining purchase history data for each of a plurality of users of the electronic catalog;

maintaining community data indicative of user memberships within specific explicit-membership communities that users explicitly join, wherein each of the explicit-membership communities represents a respective subset of a general user population;

monitoring online browsing of the electronic catalog by a first user who is a member of an explicit-membership community to detect that an item accessed by the first user has been purchased by a second user who is also a member of the explicit-membership community, as reflected by the purchase history data and the community data; and

in response to detecting that the item has been purchased by the second user, supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user, said catalog page being a page on which the item is displayed.

46. The method of Claim 45, further comprising, in response to detecting that the item has been purchased by the second user, providing an option to the first user to send a message to the second user.

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47. The method of Claim 46, wherein providing an option to the first user comprises providing an option to send an instant message to the second user.

48. The method of Claim 45, wherein the catalog page is an item detail page.

49. The method of Claim 45, wherein the notification includes contact information of the second user.

50. The method of Claim 45, wherein the community is a private community.

51-52: (withdrawn)

53. A computer implemented method of assisting users in selecting items to purchase from an electronic catalog of items, the method comprising:

maintaining purchase history data for each of a plurality of users of the electronic catalog;

maintaining personal address book data for each of a plurality of the users;

monitoring online browsing of the electronic catalog by a first user to detect that an item accessed by the first user has been purchased by a second user that is included in a personal address book of the first user, as reflected by the purchase history data and the personal address book data; and

in response to detecting that the item has been purchased by the second user, supplementing a catalog page requested by the first user to include a notification that the item has been purchased by the second user;

wherein the method is performed by a server system that provides functionality for browsing and making purchases from the electronic catalog.

54. The method of Claim 53, wherein the notification includes contact information of the second user.

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55. The method of Claim 53, further comprising, in response to detecting that the item has been purchased by the second user, providing an option to the first user to send a message to the second user.

56-62: (Withdrawn)

63. The method of Claim 53, wherein the catalog page is an item detail page.

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